

# Industrial Technology

## MACHINE TOOL PATHWAY, INDUSTRIAL TECHNOLOGY DEGREE PROGRAM

<b>GENERAL EDUCATION REQUIREMENTS, FOR ALL INDUSTRIAL TECHNOLOGY OPTIONS</b>		<b>18 CREDITS</b>
CS 101 Computer Literacy		3 credits
EN 110 College Composition or EN 120 Composition and Occupational Communications		3 credits
MT 121 Technical Math I, or MT 125 College Math I		4 credits
MT 122 Technical Math II, or MT 126 College Math II		4 credits
PH 190 Basic Physics		4 credits
PH 191 Lab for PH 190		0 credits

<b>INDUSTRIAL TECHNOLOGY REQUIREMENTS, FOR ALL INDUSTRIAL TECHNOLOGY OPTIONS</b>		<b>16 CREDITS</b>
IT 115 Technical Graphics/CAD		2 credits
IT 125 Materials and Materials Processing		3 credits
IT 210 Industrial Inspection/Metrology		2 credits
IT 251 Work Design		3 credit
IT 260 Manufacturing Management		4 credits
DF 230 Introduction to Solid Works		2 credits

<b>MACHINE TOOLS PATHWAY REQUIREMENTS</b>		<b>16 CREDITS</b>
IT 121 Machine Tool Practice I		4 credits
IT 131 Machine Tool Practice II		4 credits
IT 141 Machine Tool Practice III		4 credits
IT 102 Computer Numerical Control (CNC) Mill Programming		2 credits
IT 103 Computer Numerical Control (CNC) Lathe Programming		2 credits

<b>TECHNICAL ELECTIVES</b> (Other courses with advisement, check prerequisites)		<b>10 CREDITS</b>	
DF 106 Technical Graphics I w/Auto Cad	4 credits	IT 220 Mastercam,	2 credits
DF 222 3-D Auto CAD	2 credits	IT 250 Coordinate Measuring Machine	2 credits
DF 235 Introduction to Pro-Engineer	3 credits	IT 265 Jig & Fixture Design	3 credits
DF 251 Introduction to Auto Cad	2 credits	IT 299 Mfg. Technology Internship	3 credits
IT 110 Plastic Mold Design	3 credits	ME 321 Tool Design I	2 credits
IT 122 CNC Mill Operation	2 credits	ME 484 Geometric Dim. and Tol.	1 credit
IT 123 CNC Lathe Operation	2 credits	ME 485 Lab for 484	1 credit
IT 126 Statistical Process Control	3 credits	MT 143 Introduction to Statistics I	4 credits

### RECOMMENDED SEMESTER SEQUENCE FOR BUFFALO STATE TRANSFER – SEE ADVISOR

#### FALL SEMESTER

IT121	Machine Tool Practice I	4 cr.
IT210	Industrial Inspection/Metrology	2 cr.
IT115	Technical Graphics/CAD	2 cr.
IT102	CNC Mill Programming	2 cr.
	Technical Elective	2-4 cr.
	<b>Total Credits</b>	<b>12-14 cr.</b>

#### SPRING SEMESTER

IT131	Machine Tool Practice II	4 cr.
CS101	Computer Literacy	3 cr.
MT121	Technical Math I	4 cr.
IT103	CNC Lathe Programming	2 cr.
	Technical Elective	2-4 cr.
	<b>Total Credits</b>	<b>15-17 cr.</b>

#### FALL SEMESTER

IT141	Machine Tool Practice III	4 cr.
IT125	Mat's and Materials Processing	3 cr.
IT251	Work Design	3 cr.
EN110	College Composition	3 cr.
	Technical Elective	2-4 cr.
	<b>Total Credits</b>	<b>15-17 cr.</b>

#### SPRING SEMESTER

DF230	Introduction to Solid Works	2 cr.
PH190	Basic Physics	4 cr.
PH191	Lab for PH190	
IT260	Manufacturing Management	4 cr.
MT122	Technical Math II	4 cr.
	Technical Elective	2-4 cr.
	<b>Total Credits</b>	<b>16-18 cr.</b>

**TOTAL CREDITS REQUIRED 60**